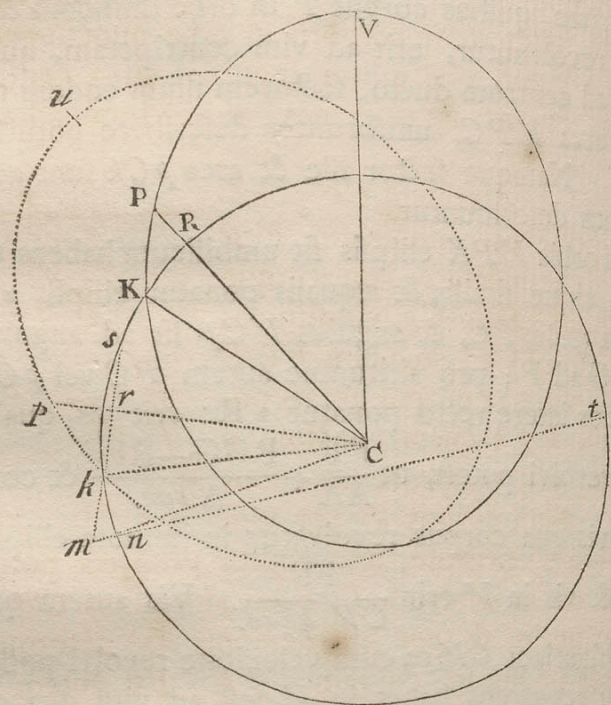


fit ad seipsam in altitudine CV ut $\frac{1}{A \text{ cub.}}$ ad $\frac{1}{CV \text{ cub.}}$, eadem dif-
ferentia in omni altitudine A valebit $\frac{RGG-RFF}{A \text{ cub.}}$. Igitur ad vim

$\frac{FF}{AA}$, qua corpus revolvi potest in ellipsi immobili VPK , addatur
excessus $\frac{RGG-RFF}{A \text{ cub.}}$; & componetur vis tota $\frac{FF}{AA} + \frac{RGG-RFF}{A \text{ cub.}}$

qua corpus in ellipsi mobili upk iisdem temporibus revolvi possit.

Corol. 3. Ad eundem modum colligetur quod, si orbis immobili



VPK ellipsis sit centrum habens in virium centro C ; eique similis,
æqualis & concentrica ponatur ellipsis mobilis upk ; sitque $2R$
ellipsoos hujus latus rectum principale, & $2T$ latus transversum sive
axis major, atque angulus VCP semper sit ad angulum VCP
ut G ad F ; vires, quibus corpora in ellipsi immobili & mobili
temporibus æqualibus revolvi possunt, erunt ut $\frac{FFA}{T \text{ cub.}}$ & $\frac{FFA}{T \text{ cub.}}$ +
 $\frac{RGG-RFF}{A \text{ cub.}}$ respective.

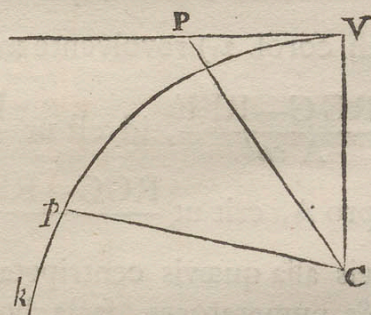
Corol.

Corol. 4. Et universaliter, si corporis altitudo maxima CV nomi-
netur T , & radius curvaturæ quam orbis VPK habet in V , id est
radius circuli æqualiter curvi, nominetur R , & vis centripeta, qua
corpus in trajectory quacunque immobili VPK revolvi potest in
loco V , dicatur $\frac{VFF}{TT}$, atque aliis in locis P indefinite dicatur X , al-
titudine CP nominata A , & capiatur G ad F in data ratione anguli
 VCP ad angulum VCP : erit vis centripeta, qua corpus idem eof-
dem motus in eadem trajectory upk circulariter mota temporibus

iisdem peragere potest, ut summa virium $X + \frac{VRGG-VRFF}{A \text{ cub.}}$.

Corol. 5. Dato igitur motu corporis in orbe quocunque immobili,
augeri vel minui potest ejus motus angularis circa centrum virium
in ratione data, & inde inveniri novi orbes immobiles in quibus
corpora novis viribus centripetis gyrentur.

Corol. 6. Igitur si ad rectam CV positi-
one datam erigatur perpendicularum VP
longitudinis indeterminatæ, jungaturque
 CP , & ipsi æqualis agatur Cp , constituens
angulum VCP , qui sit ad angulum VCP
in data ratione; vis qua corpus gyron po-
test in curva illa Vpk quam punctum p
perpetuo tangit, erit reciproce ut cubus
altitudinis CP . Nam corpus P per vim
inertiae, nulla alia vi urgente, uniformiter progredi potest in recta
 VP . Addatur vis in centrum C , cubo altitudinis CP vel Cp re-
ciproce proportionalis, & (per jam demonstrata) detorquebitur mo-
tus ille rectilineus in lineam curvam Vpk . Est autem hæc curva
 Vpk eadem cum curva illa VPQ in corol. 3. prop. xli. inventa,
in qua ibi diximus corpora hujusmodi viribus attracta oblique af-
cendere.



PROPO.